

Check and Final Plan Checklist

For Local Public Agency (LPA) Projects Let by the Iowa Department of Transportation (Iowa DOT)

Project No.: _____ Date: _____ LPA or Consulting Firm: _____

Name of Designer: _____ Phone No.: _____ e-mail: _____

Note: This checklist is not intended to cover all of the details, notes, and information that may be necessary for acceptable check and final plans. However, this checklist addresses the items where most questions or problems generally arise. *This checklist is requested, but not required with the check plan submittal.* This checklist is not needed with the final plan submittal.

GENERAL

- ☐ **Project Concept:** For Federal-aid projects, the proposed design criteria, improvements, and project limits are consistent with the scope and type of work shown in the approved Concept Statement for Local Systems Federal-aid Projects ([Form 517001](#)) and the approved Preliminary Plans. Any significant changes to the project concept (e.g., proposed design elements, project limits, potential environmental impacts, type of work, etc.) shall be explained in the cover letter that accompanies the plans. For more information, refer to [I.M. 3.105](#), Concept Statement Instructions.
- ☐ **Environmental Document Requirements:** If the approved environmental document (e.g., Section 4(f) statement, Environmental Assessment, or Environmental Impact Statement) specifies that certain conditions shall be met, or certain sensitive areas shall be avoided, the plans shall be consistent with these requirements.
- ☐ **Format:** Plans shall conform to the [Specifications for Electronic Plan Submittals to the Iowa DOT](#).
- ☐ **Dimensions and Legibility:** Plans shall be formatted as single-sided, 11"x17" printing. To ensure that all of the plan can be printed accurately, the border widths (i.e., clear space between the edge of paper and printing on the plan) shall meet the following minimum dimensions: top and bottom = 1/4 in.; left and right = 5/8 in. All lettering and details on the 11"x17" plan sheets shall be legible if printed.
- ☐ **Check and Final Bridge or Culvert Plans:** Bridge or culvert plans shall also conform to the guidelines provided in [I.M. 3.510](#), Check and Final Bridge or Culvert Plans.
- ☐ **STIP Description:** Verify the project location description in the Statewide Transportation Improvement Program (STIP), as shown in the Transportation Program Management System ([TPMS](#)) Programming, matches the description shown on the plans and the description shown in TPMS Development. All project work must be within the limits of STIP description and the limits used for environmental review (as shown on the Concept Statement); otherwise, additional programming changes or environmental review will be required. If so, contact the Administering Office as soon as possible.
- ☐ **TPMS Project Location Map:** Verify the project location map shown in TPMS is consistent with the project location description in the STIP as shown in [TPMS](#), and the limits of the project as shown on the plans. The project location map is used to collect spatial data about the project. The TPMS project location map must be accurate. For the purposes of this data collection, the project termini on the [TPMS](#) location map should be within 0.1 miles of the actual project termini.
- ☐ **Federal Funds Programmed:** For Highway Safety Improvement Program - Secondary (HSIP-S) and county Highway Bridge Program (HBP) projects only, review the amount of Federal-aid shown in the current STIP. If the estimated Federal share exceeds the amount of Federal-aid programmed in the STIP by more than 15%, the project should not be submitted for letting, unless a STIP amendment or modification can be completed before the 1st Tuesday, 1 month prior to letting. The time required to complete a STIP amendment or modification may vary from a few days to more than a month, depending on the planning agency and the specific circumstances. If a STIP amendment or modification may be required, contact the planning agency and Administering Office as soon as possible. Projects submitted with a pending STIP amendment or modification must specify the current status and the anticipated completion date. If the amendment or modification cannot be completed before the 1st Tuesday, 1 month prior to letting, the project will either be withdrawn from the letting or authorized "as-is", which would limit

the amount of Federal-aid that can be received to whatever is programmed at the time of authorization (i.e., the STIP limit). If the county elects to authorize the project “as-is”, it will be reimbursed at the regular 80% Federal share, up to the STIP limit. However, unlike other Federal-aid projects, the STIP limit may not be adjusted for the remaining life of the project.

TITLE SHEET

- ☐ **Check Plans Stamp:** Check Plan submittals should be identified by including the words “Check Plans” on, near, or across the designer’s certification block.
 - ☐ **System Classification:** The roadway system classification shall be shown. The Systems Classification should be shown in large font near the center or upper middle part of the sheet. For county projects, use “Farm-to-Market System” for a project on a Farm-to-Market route or “Secondary Road System” for a project on a local route. For city projects, use “Urban Road System.” For projects located on the corporation line, use the system classification that is under the jurisdiction of the lead governmental agency.
 - ☐ **Location Map:** A location map with a north arrow and major street names shall be shown. Use of the 911 street names, as shown on the [Iowa DOT city and county maps](#), is recommended. The location map should be located near the left or bottom left part of the sheet. The location map should also include a scale (or be noted as “Not to Scale”) and identify the project limits including the beginning and ending stations. If project divisions are used, their limits shall also be indicated, either on the location map or in a plan note.
 - ☐ **Railroad Crossing Numbers:** If there are any railroad crossings within the project limits, include the Federal Rail Administration (FRA) crossing number for each crossing. Crossing numbers can be obtained from the FRA, [Office of Safety Analysis web site](#).
 - ☐ **Electronic Signatures:** Check Plans should not be signed. Final Plans shall be signed by the design engineer and may be signed by the LPA officials. Electronic signatures may be applied in a variety of ways, including:
 - Printing a hard copy of the plan sheet, signing by hand, and scanning the plan sheet in PDF file format; or
 - Placing a scanned image of a hand written signature into the drawing file before creating the PDF file of the plan sheet; or
 - Placing text or an image in the signature area using one of Adobe Acrobat’s electronic signature features; or
 - Any other means that produces a visual indication that the plans have been signed.
 - ☐ **Designer’s Certification Block:** The plans shall include a certification block and seal that complies with the appropriate sections or chapters of the Code of Iowa and the Iowa Administrative Code (IAC). The designer’s certification block should be shown near the bottom right part of the sheet.
 - ☐ **LPA’s Signature Block:** The plans may include a signature block that includes the title of the appropriate LPA official(s) with a space for each official(s) signature and date. If included, the LPA’s signature block should be shown near the bottom right part of the sheet.
- NOTE: If a signature block is not included, this does not relieve the LPA officials of the responsibility to approve the plans and specifications by the council or board of supervisors. Approval should be documented by means of a motion or resolution.
- ☐ **Index of Sheets:** An index listing all sheets included in the plans shall be shown. The index of sheets should be shown near the right or upper right part of the sheet. Sheets should generally be listed in the following order: title sheet, typical sections, standard details, estimated quantities tabulation, estimate reference information, supplemental tabulations, plan and profile sheets, other detail sheets, and cross sections. Use of the Iowa DOT sheet numbering system as shown in the Iowa DOT Road Design Manual, [Section 1F-1](#), is recommended. If used, it shall be used consistently.
 - ☐ **Sheet Total:** The total number of sheets included in the plan set should be shown in the upper right corner.

☐ **Availability of Cross Sections:** If cross-sections will be included, they shall be submitted with the plans. Cross-sections will be available only through the Office of Contracts. They shall not be supplied directly to bidders by the LPA.

☐ **Project Number:** The Iowa DOT project number shall be shown in at least one place on all plan sheets. Recommended placements for the title sheet and all other sheets include the middle left margin and the bottom right margin. For the title sheet, the project number should also be shown near the upper right corner or in the center (above or below the project title).

NOTE:

- Usually, only one project number should be shown on the plans. However, if the plans will include more than one project, additional project numbers should be shown, along with a description and limits of each project. In such cases, a separate entry in the [TPMS](#) and a separate electronic bid item file will be required for each project.
- If a single project spans more than one jurisdiction (e.g., across county or city boundaries), the project number used should correspond to jurisdiction in which the project stationing begins (i.e., the westerly or southerly end of the project).
- If unsure about which project number or how many project numbers to use, contact the Administering Office for assistance.

☐ **LPA Name and Project Location:** The name of the city or county shall be shown in at least one location on all plan sheets. Recommended placement is on the bottom left margin. On the title sheet, the name of the city or county and a brief description of the project location shall also be shown, preferably in the center part of the sheet. The description shall include the route or street name. Beginning and ending points shall be identified for each project, by a cross street, corporation limits, or some other feature that can be located on a map; or in the case of a bridge or culvert project, identify the feature crossed. If multiple routes or streets are included in the project, list each separately. For a Federal-aid project, the description on the plans shall be consistent with description for the project in the STIP, as shown in [TPMS](#).

☐ **Work Type Description:** A [standard work type description](#) shall be shown, preferably in the center part of the sheet. Use the work type description that best represents the largest portion of the estimated contract cost. More than one work type description may be used, but for advertising purposes, only one work type (that which represents the largest portion of the estimated contract cost) will be used. Verify that the work type description used is the same as the work type chosen in TPMS.

☐ **Standard Plans Note:** A note shall be included that specifies the location of all of the applicable [Standard Road Plans](#), [County Bridge Standards](#), [LRFD Culvert Standards](#), and/or [LRFD Precast Culvert Standards](#).

☐ **Letting Date:** A space or a box for the project letting date shall be shown, preferably on upper left margin of sheet. If the letting date is known, the appropriate date may be shown in the box or space provided.

☐ **U.S. Army Corps of Engineers 404 Permit:** If a permit is needed, include Standard Note [281-1](#) near the left or upper left part of the sheet. Complete the first blank with one of the following, as appropriate: "Nationwide Permit XX", where XX is the Nationwide Permit Number (14, 33, etc.); "Regional Permit 7", or "Individual Permit". Complete the second blank with the Corps' project-specific permit number, as shown in the subject line of the Corps' permit approval letter. The project-specific number may be omitted for projects that can proceed under a Corps Nationwide Permit without notification to the Corps, because no such number is assigned.

NOTE:

- If a bridge, culvert, or grading project does not require this permit, this shall be noted in the cover letter with the check plans.
- General 404 permit requirements are included in [Article 1105.14](#) of the Iowa DOT Standard Specifications for Highway and Bridge Construction (Standard Specifications). However, if the Corps added any special conditions to their approval of the permit, these shall be indicated on the plans.

- If the approved 404 Permit application indicated a temporary stream access will be allowed, and if a temporary stream access is required, then Standard Road Plan [EW-401](#) shall be used. Bid item quantities shall be calculated if the temporary stream access is required. If a temporary stream access is allowed by the 404 permit, but is not required, then EW-401 shall not be listed on the plans. In this case, Standard Specification [2547](#) applies, which states that a temporary stream access may be installed at the contractor's option, and if so, payment will be incidental to mobilization.
- If the approved 404 Permit application indicated that temporary stream access will not be allowed, include Standard Note [282-1](#) to note this condition.
- An electronic copy of the 404 permit shall be supplied to the Administering Office with either the Check or Final Plans submittal.
- For more information, refer to [I.M. 3.130](#), 404 Permit Process.

☐ **Iowa DNR Floodplain Construction Permit:** If a permit is needed, the following note shall be included: *"This project is covered by Iowa DNR Floodplain Construction Permit No. (insert Iowa DNR permit number)." This note should be shown on the left or upper left part of the sheet. If a bridge, culvert, or grading project does not require this permit, this shall be noted in the cover letter with the check plans. Refer to [I.M. 3.410](#), Preliminary Bridge or Culvert Plans, for more information.*

☐ **Iowa DNR Storm Water Permit:** If the project disturbs 1 acre or more of land, include one of the following notes. The note should be shown near the left or upper left part of the sheet. Any area where soil is exposed to erosive forces, such as wind or water, shall be considered disturbed. The LPA shall be responsible for obtaining the appropriate National Pollutant Discharge Elimination System (NPDES) permit. The contract documents shall not shift this responsibility to the contractor. For more information, refer to [I.M. 3.140](#), Storm Water Permits.

- If the project can be constructed under General Permit No. 2, include the following note: "This project is covered by the Iowa Department of Natural Resources NPDES General Permit No. 2. The contractor shall carry out the terms and conditions of General Permit No. 2 and the storm water pollution prevention plan which is a part of these contract documents. Refer to [Section 2602](#) of the Standard Specifications for additional information."
- If the project requires an individual permit, include Standard Note [281-2](#) and fill-in the appropriate individual permit number and submit an electronic copy of the permit to the Administering Office.

☐ **Standard Specification Note:** The following standard note shall be included near the center of the sheet: *"Refer to the Proposal Form for list of applicable specifications."*

☐ **FHWA Structure Number:** If the project involves a bridge, the FHWA structure number shall be shown, preferably on or near the location map that shows the location of the bridge. Bridges are defined as any structure with a clear opening greater than 20 feet, as measured along the centerline of the roadway.

☐ **Utility Contacts:** If any utility facilities are within or immediately adjacent to the proposed limits of construction, utility contact information (company name and a contact person's name, address, and phone number) shall be shown for each utility company. The Iowa One-Call symbol and phone number should also be displayed. These should be shown near the bottom center part of the sheet.

☐ **Automatic Traffic Recorders:** If automatic traffic recorders are present within the project limits, Standard Note [262-4](#) shall be included. See the Iowa DOT's [Automatic Traffic Recorder](#) web page to locate existing traffic recorders.

TYPICAL SECTION SHEETS

- ☐ **Dimensions and Slopes:** Proposed cross section elements shall be detailed with adequate horizontal and vertical dimensions. Pavement slopes, cut slopes, and fill slopes shall also be specified.
- ☐ **Materials Specified:** The type and thickness of surface, base and subbase materials for pavements, shoulders, sidewalks, or trails shall be shown. Materials should be identified using the appropriate bid item description for that material.
- ☐ **Number of Typical Sections:** Separate typical sections for each significantly different type of cross section found on the project shall be shown. Use separate typical sections to show differences in the number of lanes, pavement types, pavement thicknesses, curb and gutter, sidewalk, or recreational trails.
- ☐ **Station Ranges:** If more than one typical section is used, the applicable stationing ranges shall be labeled for each. If the project contains more than one plan division, the applicable division(s) for each typical section should be noted.
- ☐ **Existing Features:** For projects that involve widening, milling, resurfacing, or other modifications to the existing pavement and / or shoulder; the type, thickness, and width of existing pavement and / or shoulder structure should be shown on the typical cross section.

QUANTITY, ESTIMATE REFERENCE, GENERAL NOTE, AND TABULATION SHEETS

- ☐ **Estimated Project Quantities Tabulation:** All plans shall include an Estimated Project Quantities tabulation. Use of the Standard Tabulations ([100 Series](#)) is recommended. If a non-standard tabulation is used instead, it shall include, as a minimum, the Iowa DOT bid item code, item description, unit, and total bid item quantity. If plan divisions are used, the Estimated Project Quantities tabulation shall also indicate the bid items or quantities of items that apply to each division. A label or description of each division shall also be included. For additional information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Plan Divisions section.
- ☐ **Tabulation of Standard Plans:** Tabulations shall be included that list all of the applicable [Standard Road Plans](#), [County Bridge Standards](#), [LRFD Culvert Standards](#), and/or [LRFD Precast Culvert Standards](#), including revision dates which are current for the targeted letting. For each standard plan listed, all of the standard plans referenced by that standard plan shall also be listed.

Note: Bidders should not be referred to the Office of Bridges and Structures or the Office of Local Systems to obtain hard copies of the Standard Bridge Plans or Standard Culvert Plans. These are available in electronic format at the links provided above.

- ☐ **Supplementary Tabulations:** Supplementary tabulations should also be used to provide additional information or a breakdown of bid item quantities. When possible, include a total quantity for each bid item shown in a supplemental tabulation. The bid item quantity listed in a supplemental tabulation should match the total bid item quantity as listed in the estimated quantities tabulation. If the bid item quantity contains additional quantities that are not shown in the supplemental tabulation, note these additional quantities in the Estimate Reference Information. Use of the Standard Tabulations ([100 Series](#)), is recommended. If included, the most current version shall be used. For additional information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Iowa DOT Road Design Details section.
- ☐ **Bid Item Codes, Description, and Units:** The bid item codes, descriptions, and units listed on the plans shall match the current list of standard bid items, as shown in the Bid Items Application referenced by [I.M. 3.520](#), Electronic Bid Item Information. Only valid bid items shall be used. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Bid Items section.
- ☐ **Bid Item Specifications:** Check the SPEC code given for each item in the [Bid Item Description Book](#). If this code indicates that the specification information, including, but not limited to method of measurement and basis of payment, must be supplied by the designer, it shall be included in the plans (preferably in the Estimate Reference Information) or the applicable Special Provision. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Method of Measurement and Basis of Payment section.

- ☐ **Estimate Reference Information:** Estimate Reference Information shall be provided. Estimate Reference Information should explain what is included in a bid item and where additional information about that item can be found in the plans. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Estimate Reference Information section.
- ☐ **Non-Participating Items or Quantities:** If any bid items or quantities are excluded from participation by one or more of the project funding sources, those bid items or quantities shall be separated by means of plan divisions. Some bid items or quantities may be non-participating based on the Federal or State eligibility rules or regulations for a particular funding program. For example, some utility relocations are not eligible for Federal-aid, as described in [I.M. 3.650](#), Federal-aid Participation in Utility Relocations. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Plan Divisions section. If uncertain about whether any bid items or quantities should be designated as non-participating, contact the Administering Office for assistance.
- ☐ **Salvaged Items:** If the contractor is required to deliver and stockpile any salvaged items that will become the property of the Contracting Authority, bid item 2555-0000010, Deliver and Stockpile Salvaged Materials, shall be used. This bid item shall be placed in a non-participating plan division in the plans and in the Bid Items Application. If the Contracting Authority will deliver and stockpile the salvaged materials with its own forces, this bid item shall not be used. For more information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Salvaged Materials section.
- ☐ **Earthwork Quantities:** A breakdown of earthwork quantities should be shown in a separate tabulation or in the Estimate Reference Information. Quantities should be shown for cut, fill, the assumed shrinkage percentage, and any waste or borrow requirements.

NOTE:

1. Topsoil shall not be included in the quantity for the various excavation bid items. Topsoil should be a separate bid item, and must be included if NPDES General Permit No. 2 is required on this project.
2. Overhaul should be paid for if it is in excess of the free-haul limits specified by the contract documents. If the plans do not specify a free-haul distance, the free-haul distance will be 1000 feet, as per [Article 2108.04.E](#) of the Standard Specifications.

- ☐ **Contractor Furnished Borrow:** If the amount of contractor furnished borrow material is 10,000 cubic yards or less, which includes the combination of select soil treatment and Class 10, use bid item 2102-2625000, Embankment-in-Place. This item will not require any special submittals or testing or specifications. A reference note should be included with the bid item that indicates the embankment is contractor provided. If the quantity is greater than 10,000 cubic yards, use bid item 2102-2625001, Embankment-in-Place, Contractor Furnished.

NOTE:

1. If the quantity is greater than 10,000 cubic yards, the contractor will be required to provide sampling, testing, and a proposed borrow report to the Engineer as per [Materials I.M. 545](#).
2. If the quantity is greater than 50,000 cubic yards, the Iowa DOT Administering Office will forward a copy of the check plans to the Office of Design, Methods Section, for posting on its [Anticipated Contractor-furnished Borrow Information web site](#) to provide bidders with advance notice of projects with large amounts of contractor furnished borrow.

- ☐ **Roadway Pipe Culverts:** If roadway pipe culverts are part of the project work, the bid item, 2402-2720100, Excavation, Class 20, For Roadway Pipe Culvert, shall be included as per the [Standard Road Plans](#).
- ☐ **Earth Shoulders / Fill:** If the work involves construction of earth shoulders or earth shoulder fill above the subgrade elevation adjacent to a paved surface or curb and gutter, one of the following bid items shall be included: if the volume of earth shoulder is included in the Class 10 Excavation quantity, bid item 2123-7450020, Shoulder Finishing, Earth, shall be used; if the volume of earth shoulder is not included in the Class 10 Excavation quantity, then bid item 2123-7450000, Shoulder Construction, Earth, shall be used. Each side of a trail or roadway is measured separately.

- ☐ **Lump Sum Item Split:** For each lump sum item on a project with more than one plan division, a decimal fraction quantity shall be included for each plan division, if the lump sum item applies to that division. For each lump sum item, the sum of the quantities shown for all the applicable plan divisions shall equal 1.0.
- ☐ **Guardrail Items:** If the construction includes guardrail, all of the bid items as listed on the applicable [BA](#) or [LS](#) series of Standard Road Plans shall be included. The applicable Standard Tabulations in the [108 series](#) shall be used. For more information, refer to [I.M. 3.213](#), Traffic Barriers (Guardrail and Bridge Rail).
- ☐ **Trail Paving:** Portland Cement Concrete (PCC) or Hot Mix Asphalt (HMA) bicycle or pedestrian trails shall be paid for with the bid items specified by [Section 2511](#) of the Standard Specifications. HMA Commercial Mix is also acceptable for trails (see item below).
- ☐ **HMA Commercial Mix for Trail Paving:** If bid item 2303-0000100, Hot Mix Asphalt Mixture, Commercial Mix, is used for trail paving, the following note shall be included in the Estimate Reference Information, unless an alternative specification has been approved: *"All work shall be completed in accordance with Iowa DOT Standard Specifications, except that Article 2303.02 Materials, shall not apply. The Contractor shall furnish and place a commercial asphalt mix with a three-eighths (3/8) maximum aggregate size and a minimum asphalt content of 6.25 %. Class II compaction shall be required. Payment for asphalt cement shall not be made separately but shall be included in the unit price bid for this item."*
- ☐ **Bridge Approach Paving:** If bridge approach paving is included in the work, all of the bid items as listed on the applicable [BR](#) series of Standard Road Plans shall be included. Standard Tabulation [112-6](#) shall be used.
- ☐ **Bridge Removals:** For bridge removals, the LPA must have a thorough asbestos inspection completed by a person knowledgeable in asbestos materials, sampling techniques, and familiar with all asbestos regulations. The "Asbestos Notification of Bridge Demolition and Renovation" form is required at the time of bridge demolition, in order to comply with the State and Federal asbestos regulations. For more information, refer to [I.M. 3.160](#), Asbestos Inspection, Removal, and Notification Requirements.
- ☐ **Construction Survey:** Bid item 2526-8285000, Construction Survey, shall be included if the contractor is providing the construction survey for the project.
- ☐ **Flaggers:** Bid item 2528-8445113, Flaggers, shall be included if reference is made to roadway flaggers in a Standard Road Plan, or if flaggers are called for by the traffic control details or notes. The bid quantity for Flaggers shall be designated as "Per Proposal" on the plans. If desired, the designer may estimate a quantity for purposes of preparing the engineer's estimate. However, the Office of Contracts will determine the actual bid quantity based on the number of working days assigned for the project and insert this number on the proposal.
- ☐ **Safety Closures:** Bid item 2518-6910000, Safety Closure, shall be included if road closures or hazard closures are shown on a referenced Standard Road Plan or traffic control detail, or if they are required by a plan note. Use of Standard Tabulation [108-13A](#) for Safety Closures is recommended.
- ☐ **Pavement Smoothness:** If the Pavement Smoothness, [Section 2316](#) of the Standard Specification, is desired for HMA or PCC paving, this shall be indicated in the Estimate Reference Information for the appropriate paving bid items. If called for, this specification shall be added in its entirety. Parts of the specification shall not be deleted.
- ☐ **Certified Plant Inspection:** If the Certified Plant Inspection, [Section 2521](#) of the Standard Specifications, is desired for a specific bid item (e.g., HMA or PCC paving, structural concrete, or flowable mortar), this shall be indicated in the Estimate Reference Information of the bid item(s) for which Certified Plant Inspection will apply. If Certified Plant Inspection is called for, it may be appropriate to also include bid item 2520-3350010, Field Laboratory.
- ☐ **Subdrains:** If a drainable base is used, a subdrain system should be included. If subdrains are used, all the associated bid items shall be included, as indicated on the appropriate Standard Road Plan.
- ☐ **Pavement Removal and Patching:** If pavement removal, driveway removal, or patching is required for the project, the type and thickness of the existing pavement shall be shown on the plans. This

information may be shown in the tabulations for the removal or patching items, in the Estimate Reference Information, or in separate tabulation for existing pavement (use of Standard Tabulation [102-5](#) is recommended).

- ☐ **Mobilization:** Bid item 2533-4980005, Mobilization, shall be included for all contracts, except maintenance aggregate, materials only, granular surfacing, or other minor contracts.
- ☐ **Traffic Control:** Bid item 2528-8445110, Traffic Control, shall be included, unless the plans indicate the LPA will provide and maintain all the necessary traffic control devices. If the LPA does provide the traffic control devices, the plans shall specify where they will be provided to the contractor.
- ☐ **Clearing and Grubbing:** When large areas densely covered by trees and other vegetation must be cleared, bid item 2101-0850001, Clearing and Grubbing, measured by the acre, should be used. If this acre bid item is used, the plans should specifically indicate the extent of the area to be cleared and grubbed. When the area to be cleared is not densely covered by trees or other vegetation, bid item 2101-0850002, Clearing and Grubbing, measured by the unit, shall be used. In either case, the Estimate Reference Information for these items should include a reference to plan sheet or tabulation where the quantities are shown. Use of Standard Tabulation [110-17](#) is recommended.
- ☐ **Scrape Test Note:** If the project involves either removal or painting of an existing painted steel bridge or railing, the following note shall be included: *"Scrape samples of this bridge were taken to get an indication of the existence of and level of total chromium and total lead. The analysis of total chromium in the sample was ___ppm. The analysis of total lead in the sample was ___ppm. The analysis shows the existence of these two toxic constituents. The levels indicated by these tests could create conditions above regulatory limits for health safety requirements. No other substances were analyzed. The bidder should not rely on the LPA's testing and analysis for any purpose other than an indication of the existence of these two constituents."*
- ☐ **Pollution Prevention Plan (PPP):** If a National Pollutant Discharge Elimination System (NPDES) permit is required for the project, the PPP and the appropriate erosion control bid items associated with the PPP shall be included, as listed in [Section 2602](#) of the Standard Specifications, unless the LPA will be providing and maintaining all of the erosion control measures. If the LPA will provide these, this shall be clearly stated on the plans. For more information on the NPDES permit procedures, refer to [I.M. 3.140](#), Storm Water Permits.
- ☐ **Erosion Control Mobilizations:** Bid item 2602-0010010, Mobilizations, Erosion Control, shall be included in projects that are not stand-alone erosion control or landscaping projects, if one or more of the following bid item quantities is shown on the plans: 2601-2642100, Stabilizing Crop - Seeding and Fertilizing (1 acre or greater); 2601-2642120, Stabilizing Crop - Seeding and Fertilizing (Urban) (1 acre or greater); 2602-0000020, Silt Fence (250 feet or greater); or 2602-0000030, Silt Fence for Ditch Checks (250 feet or greater). Stand-alone erosion control or landscaping projects do not require this item since the mobilization work is covered by the regular mobilization bid item.
- ☐ **Incentive / Disincentive Items:** If the LPA would like to include an estimated cost for incentives or disincentives in the bid price, include incentive / disincentive bid items as appropriate. For more information, refer to [Local Systems Mailing](#) letter on Use of Incentive / Disincentive Bid Items, dated February 7, 2012.
- ☐ **Project Funding Signs:** If the LPA elects to include such signs as part of the project work, the cost of such work shall be non-participating with respect to Federal and State funds. If used, the signs must conform to the Manual on Uniform Traffic Control Devices (MUTCD). Only essential information regarding the source and amount of funding shall be included on the sign. Promotional information such as the identification of public officials, contractors, organizational affiliations, symbols, logos or other items are prohibited.

PLAN AND/OR PROFILE SHEETS

- ☐ **Existing Features:** The plans should show the location of existing topographical features (e.g., existing pavement, structures, buildings, etc.).
- ☐ **North Arrow:** A North arrow shall be shown on all plan sheets.

- ☐ **Scale:** All plan and profile sheets shall show a horizontal scale. Profile sheets shall also show a vertical scale.
- ☐ **Proposed Right-of-Way (ROW):** If the project involves ROW acquisitions, permanent easements, or temporary easements, the proposed right-of-way lines, easement lines, property lines, parcel numbers, and property owners shall be shown. For projects involving several ROW acquisitions or easements, use of separate ROW sheets is recommended.
- ☐ **Existing ROW:** Existing ROW lines shall be shown.
- ☐ **Storm Sewers:** The station and offset information for all new intakes and utility accesses shall be shown on the plan sheets or in a tabulation. If needed, storm sewer profiles should be shown on separate sheets.
- ☐ **Culverts:** The station, skew, length, and flow line elevations of all roadway and entrance culverts shall be identified, either on the plan and profile sheets or in a separate tabulation.
- ☐ **Profiles:** The vertical profile data shall be shown, including the percent grade, vertical curve length, K factor, stopping sight distance (SSD), and design speed. The point of vertical curvature (P.V.C.), point of vertical tangency (P.V.T.), and point of vertical intersection (P.V.I.) stations and elevations shall be labeled.
- ☐ **Alignments:** The horizontal curve data shall be shown, including the point of intersection (P.I.) station, curve length, radius or degree of curvature, tangent length, and delta angle. The point of curvature (P.C.) and point of tangency (P.T.) stations should also be shown.
- ☐ **Construction Survey Information:** If the contractor will be responsible for the construction staking, the following information shall be shown:
 - **Benchmarks:** List the type, location, and elevation of each benchmark. This information may be listed on a separate sheet if necessary.
 - **Reference Point Information:** List the type, station, offset, and coordinates of each reference point (sometimes called control points). Reference points should also be tied to other existing fixed objects if they are likely to be disturbed by construction activities. Reference tie information should be included by using either a sketch showing the distances to the tie points, or a verbal description of the same. At least 3 reference ties should be given for each reference point. This information may be listed on a separate sheet if necessary.
 - **Horizontal Alignment Information:** List the horizontal coordinates of all P.I.s. The bearing of all tangent lines should also be shown.
- ☐ **Utilities:** All known utility facilities within or immediately adjacent to the project limits shall be shown, including the approximate location of such facilities and the name of the utility company. For more information, refer to [I.M. 3.640](#), Utility Accommodation and Coordination.
- ☐ **Railroad (RR) Crossings:** All RR crossings within or immediately adjacent to the project limits shall be shown, including the RR property lines and the name of the RR company. This information shall be included anytime the contractor will be required to gain access or perform work on the RR right-of-way or within 25 feet of the centerline of the outermost RR track, even if the RR facilities are not directly impacted by the project. It is very likely that a railroad agreement (or written/email confirmation that an agreement is not necessary), and a specification will be necessary. For more information, refer to [I.M. 3.670](#), Work on Railroad Right-of-Way.
- ☐ **Intersection Details:** For new construction or reconstruction projects, intersection detail drawings shall be included. Dimensions of channelization islands, curve radii, taper ratios, and taper lengths shall be shown. Intersection details shall be at a scale sufficient to show the necessary geometric details. A 1"=20' scale is recommended.
- ☐ **Jointing Details:** For PCC paving projects, the spacing and type of joints shall be shown. Use of the Standard Road Plans [PV-101](#) and / or special jointing details is recommended. Joint types shall be specified using the standard types shown on the Standard Road Plans.

- ☐ **Non-Participation Limits:** If any portion of the contract work is outside the approved or eligible project limits for one or more of the project's funding sources, the limits of the participating work shall be indicated on the plan sheets, including the beginning and ending stations.

TRAFFIC CONTROL

- ☐ **Status of Vehicular Traffic:** The plans shall state whether traffic will be maintained or detoured during construction. This may be accomplished via special traffic control notes, details, Standard Traffic Control Plans, or some combination thereof. If part or all of the traffic control devices will be provided, installed, and/or maintained by the LPA, this shall also be stated.
- ☐ **Status of Pedestrian Traffic:** The plans shall indicate how pedestrian traffic will be addressed during construction. Pedestrian paths may be maintained, closed, or detoured during construction. This may be accomplished via special traffic control notes, details, or some combination thereof. In all cases, pedestrian paths and / or detours shall comply with ADA and MUTCD requirements. For more information, refer to [Section 2528](#) of the Standard Specifications and the [Section 9A-5](#) of the Iowa DOT Design Manual.
- ☐ **Standard Traffic Control Plans:** Use of applicable Standard Road Plans, [TC Series](#), is strongly recommended. If used, the traffic control notes should explain under what conditions or which locations each Standard Road plan applies.
- ☐ **Phased Traffic Control:** If the project involves phased construction, project-specific traffic control plans or details shall be included, unless the Standard Road Plans can adequately describe the necessary traffic control for each phase. The traffic control plans or details shall show the appropriate traffic control devices for each phase. Staging notes shall also be included that describe which items of work must be completed as part of each phase.
- ☐ **Detour Routes:** If a detour will be required, the detour route and the appropriate temporary traffic control devices shall be specified, unless all of the traffic control devices will be provided, installed, and maintained by the LPA. Use of a schematic or "to-scale" detour plan sheet is recommended.

Note: If the detour route and / or signing involves a Primary Highway in any way, contact the appropriate [Iowa DOT District Office](#) to obtain approval of the proposed detour route and / or signs.

- ☐ **References to the MUTCD:** It is not necessary to reference the MUTCD with respect to temporary or permanent traffic control devices shown on the plans. The Standard Specifications require that all traffic control devices comply with the MUTCD, as adopted by the Iowa DOT. If reference is made to the MUTCD on the plans, it shall be referred to as the *"Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted by the Department per 761 of the Iowa Administrative Code (IAC), Chapter 130."*

TRAFFIC SIGNAL SHEETS

- ☐ **Scale:** Drawings shall be of sufficient scale to show the necessary details. A 1"=20' scale is recommended.
- ☐ **Pavement Markings Details:** Pavement markings including lane lines, stop bars, crosswalks, symbols, and legends should be shown.
- ☐ **Signal Details:** Signal pole, signal head, mast arm, and detector loops locations should be shown.
- ☐ **Roadway Details:** Edges of pavement, curbs, sidewalks, and pedestrian curb ramps should be shown.
- ☐ **Tabulations:** Tabulation(s) shall be provided that list all of the items and quantities that are included in the lump sum Traffic Signalization bid item.

ACCESSIBILITY

If the roadway, sidewalks, or shared use paths are being altered by the project, the Americans with Disabilities Act (ADA) applies. The following items shall be included on the plans in accordance with the [Design Manual](#), Chapter 12, and [I.M. 1.080](#), ADA Requirements:

- ☐ **Curb Ramps:** Include compliant curb ramps where required. If ramps already exist but are not fully compliant (e.g., they do not include detectable warnings), those ramps shall either be replaced or retrofitted to meet current ADA requirements.
- ☐ **Tabulations:** Standard Tabulation [113-10](#), Sidewalk Compliance, shall be included. Other tabulations in the 113 series should be included as appropriate.
- ☐ **Sidewalk Details:** Sheets that detail the curb ramp designs shall be provided according to the Design Manual, [Section 1F-18](#).